Stark State COLLEGE

MAP MY ACADEMIC PLAN

ASSOCIATE OF SCIENCE

PRE-ENGINEERING – MECHANICAL ENGINEERING

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

1920 Catalog
Effective Summer 2019

4054

Engineering Technologies Division *Engineering Technology Department*

ARTICULATING TO A BS IN MECHANICAL ENGINEERING WITH THE UNIVERSITY OF AKRON

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
FRESHMAN EXPERIENCE				
SSC101	Student Success Seminar^^	1	*Take first semester*	
WRITTEN & ORAL COMMUNICATION				
ENG124	College Composition^	3	Co-ENG024 **or** Co-ENG011 **or** Proficiency	
SOCIAL & BEHAVIORAL SCIENCES				
BUS221	Microeconomics^	3	IDS102 **or** Proficiency	
SOC225	Cultural Diversity	3		
ARTS & HUMANITIES				
HIS122	U.S. History II from 1877	3		
PHL122	Ethics	3		
SCIENCES & MATHEMATICS				
CHM141	General Chemistry I (lab)^⅄	5	CHM101 **or** Proficiency	
CHM142	General Chemistry II (lab)	5	CHM141	
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094) **or** Proficiency	
MTH223	Analytical Geometry and Calculus I^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency	
MTH224	Analytical Geometry and Calculus II	4	MTH223	
CONCENTRATION CORE				
MTH225	Analytical Geometry and Calculus III	4	MTH224	
PHY221	General Physics I w/Calculus (lab)	5	MTH223 **and** MTH224	
CST121	Modeling and Simulation	3	MTH221 **or** MTH223	
DET125	Basic AutoCAD	3		
MET123	Material Science	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 **or** Pre-Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
	TOTAL CREDIT HOURS	**63**		

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

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Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	*Take first semester*
CHM141	General Chemistry I (lab)^⅄	5	CHM101 **or** Proficiency
ENG124	College Composition^	3	Co-ENG024 **or** Co-ENG011 **or** Proficiency
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	5	(MTH093 and MTH094) **or** Proficiency
		14	
Second Semester			
PHL122	Ethics	3	
SOC225	Cultural Diversity	3	
MTH223	Analytical Geometry and Calculus 1^*	4	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
CHM142	General Chemistry II (lab)	5	CHM141
		15	
Summer Semester			
MTH224	Analytical Geometry and Calculus II	4	MTH223
Third Semester			
PHY221	General Physics I w/Calculus (lab)	5	MTH223 **and** MTH224
MTH225	Analytical Geometry and Calculus III	4	MTH224
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 **or** Pre-Co-PHY221
BUS221	Microeconomics^	3	IDS102 **or** Proficiency
		16	
Fourth Semester			
CST121	Modeling and Simulation	3	MTH221 **or** MTH223
MET221	Advanced Strength of Materials	2	MET124
MET123	Material Science	3	
HIS122	U.S. History II from 1877	3	
DET125	Basic AutoCAD	3	
		14	
	TOTAL CREDITS	**63**	

^Based on SSC placement scores

^^To promote student success, this course should be taken in the first semester

⅄Because of the strong emphasis on science in this major, applicants must have successfully completed Chemistry and Biology in high school. Students who did not complete the courses in high school, and those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

*Students who test directly into Analytical Geometry and Calculus I should contact the Math Department Chair for the possibility of receiving credit for Precalculus.

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FULL-TIME STUDENT ADVISING NOTES

Academic Advising
Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

The University of Akron

Elective Additional Credit
Bridge courses that can be taken at Stark State College, prior to attending The University of Akron, that apply towards The University of Akron BS Degree: COM121 Effective Speaking, ENG221 Technical Report Writing, PHY222 General Physics II w/Calculus, and MTH227 Ordinary Differential Equations. If you plan on taking additional courses at Stark State College beyond this list, we recommend you verify transferability with a University of Akron advisor prior to taking the course. Self-selection of courses and not following the approved degree program could adversely affect graduation, transfer to a 4-year institution, and financial aid. Visit Transferology at http://www.transferology.com to assist in developing a plan for transferring to another college or university. Students should select Ohio Transfer Module approved and TAG approved courses.

Bachelor's Degree
Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer. Contact The University of Akron's Transfer Student Services Center (330-972-7009) during the first semester to discuss junior year Stark State College Associate of Science pre-engineering transition strategies to The University of Akron's Engineering BS programs.